

Rittal – The System.

Faster – better – everywhere.

▶ Power Isolation Solutions Arc Flash Prevention Starts Here



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POWER DISTRIBUTION

CLIMATE CONTROL

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Arc flash prevention begins with Rittal



When it comes to high-current electrical equipment, safety and machine up time are two of the most important considerations on the production floor. To lessen concern of these critical factors on engineers and service personnel, the brain trust at Rittal has developed a technology that minimizes the risk of arc flash explosions in the smart, highly engineered way that only Rittal can.

The real-life issues of an arc flash incident

- 5 to 10 arc flash incidents occur every day in the United States
- 2,000 workers are admitted to burn centers per year for treatment of severe arc flash burns
- Arc flash incidents cause multiple deaths per year
- Medical treatment may cost \$1.5 million or more
- 8-12 months of employee recovery time and the possibility of permanent disability
- Average litigation cost of \$10 to \$15 million dollars

Rittal's Arc Flash Solution

When considering safety and design flexibility during the planning stage, Rittal's Power Isolation Enclosure solutions provide the capability to isolate high- and low-voltage equipment within the confines of their respective enclosure, assisting in compliance with NFPA 70E work place safety standards.

- Rittal's off-the-shelf power isolation solutions decrease the risk of personnel being exposed to arc flash and related injuries
- Rittal's solutions provide the capability to isolate low-voltage equipment and components used for programming, data acquisition, and system adjustment from high voltage components
- High-voltage line-side power is isolated within its own enclosure



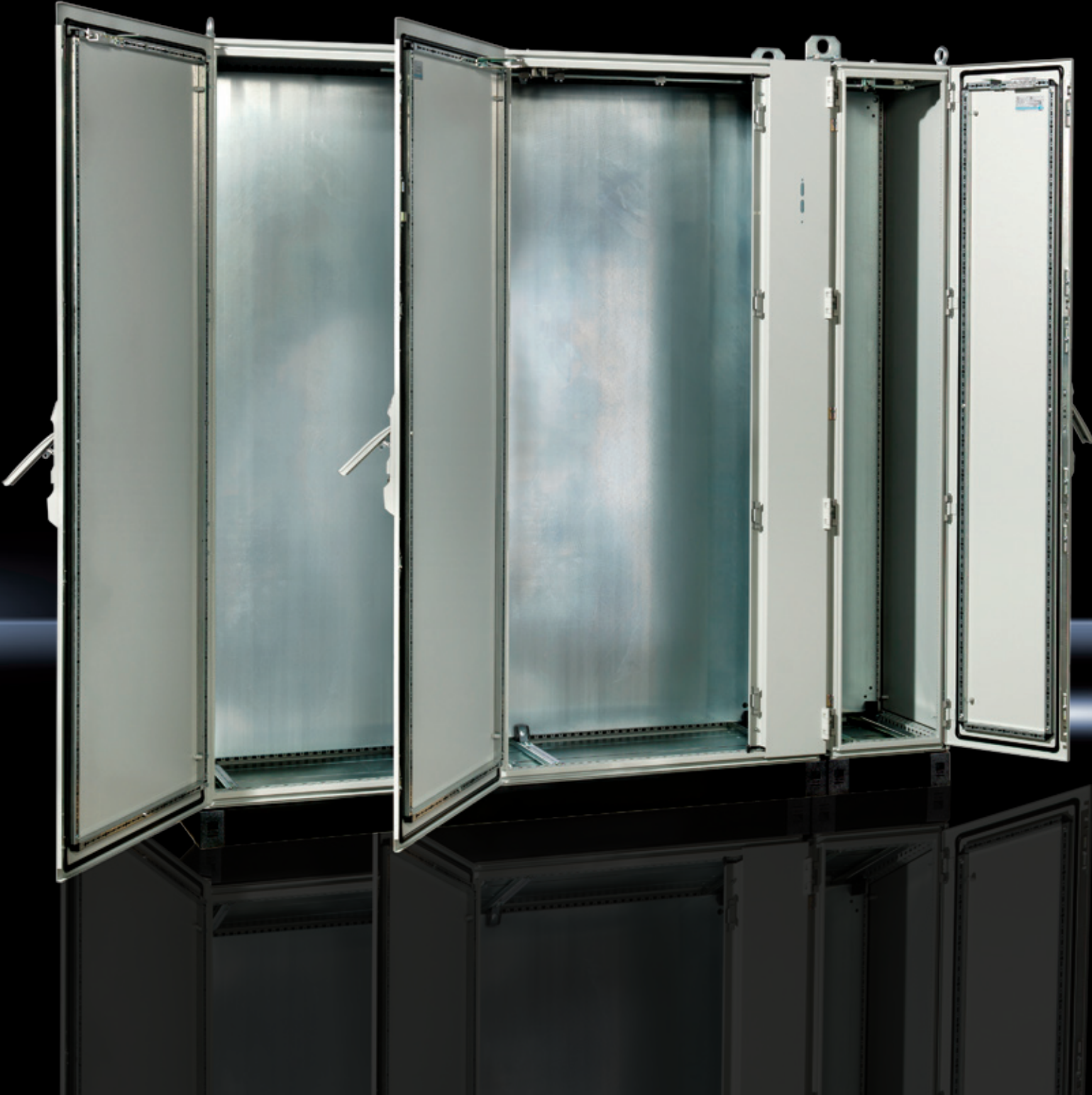
A partition wall serves as a barrier to high voltage line side power.

IT INFRASTRUCTURE

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An unlimited choice of low-voltage and high-voltage enclosure combinations.



ENCLOSURES

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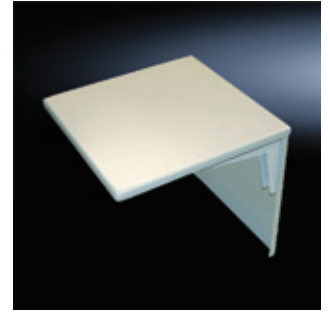
CLIMATE CONTROL

Customizable configurations and solutions from standard components provide a virtually unlimited choice of low-voltage (less than 50 volts) and high-voltage cabinet combinations to suit your specific application. Rittal's off-the-shelf solution minimizes the level of Personal Protective Equipment required to perform routine maintenance, especially when isolating (less than 50 volts) in its own enclosure. This control enclosure may also be disengaged from the interlock system to provide testing and diagnostic access while high-voltage equipment is energized.

Accessories, such as external fold-down shelves, external data pockets, and interface flaps, allow for data retrieval, equipment monitoring, and routine maintenance to be performed externally to minimize exposure to arc flash hazards.

Fold-down shelf

Collapsible shelf designed to support programming and monitoring equipment. Locks in raised position and folds down when not in use.



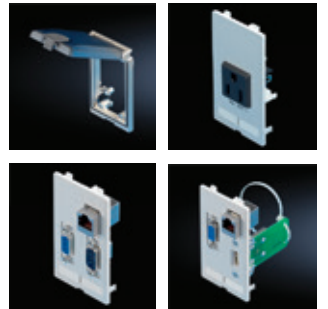
External data pocket

Based on the popular AE wallmount enclosure, this data pocket is designed to hold system-related documents.



Interface flaps, modular

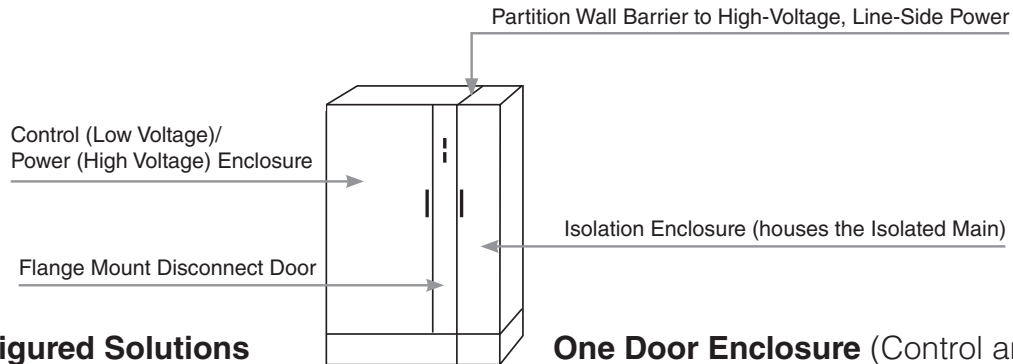
For universal use in all situations where rapid access to interfaces and sockets are needed. The enclosure remains closed and protected from ambient influences and unauthorized access.



Interlocking door system ensures that the high voltage enclosure cannot be opened while disconnect switch is in "ON" position. For additional safety, all interlocked doors and master door must be closed in order to re-energize the enclosure.

Part Number Explanation

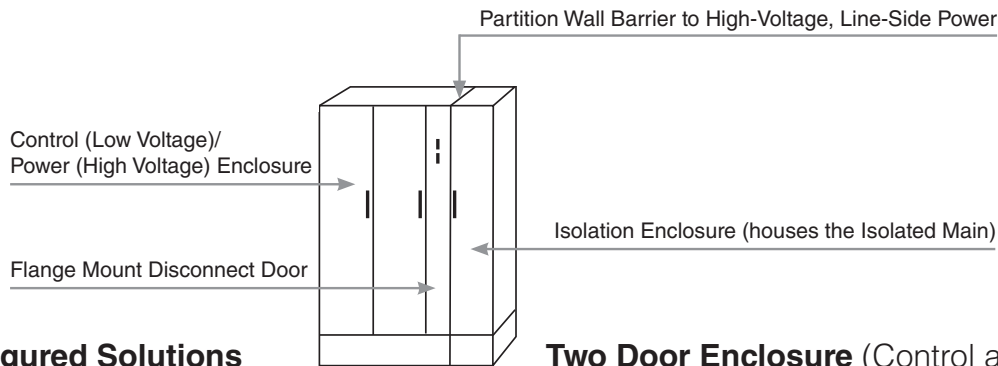
	Height		Width (add numbers)			Depth	
TS	83	R	32C	40P	16R	20	
Product Family	Overall Height in Inches (Approximate)	Rittal System	Enclosure Width in Inches (Approximate) followed by Control (Low Voltage) and Power (High Voltage) Suffix P=Power=High Voltage C=Control=Low Voltage (<50 volts) PC=Power and Control (High and Low Voltage) combined			Isolation Enclosure Width in Inches (Approximate)	Overall Depth in Inches (Approximate)



Preconfigured Solutions

One Door Enclosure (Control and Power Combined)

Part Number	Description	Overall HxWxD (mm)	Panel Dimensions High/Control Voltage Enclosure HxW (mm)	Panel Dimensions Isolation Enclosure HxW (mm)
TS83R32PC16R20	1 Door Enclosure (1 Door for High Voltage and Control Voltage Combined)	2100x1200x500	1900x700	1900x300
TS83R40PC16R20		2100x1400x500	1900x900	1900x300
TS83R32PC16R24		2100x1200x600	1900x700	1900x300
TS83R40PC16R24		2100x1400x600	1900x900	1900x300
TS90R32PC16R24		2300x1200x600	2100x700	2100x300



Preconfigured Solutions

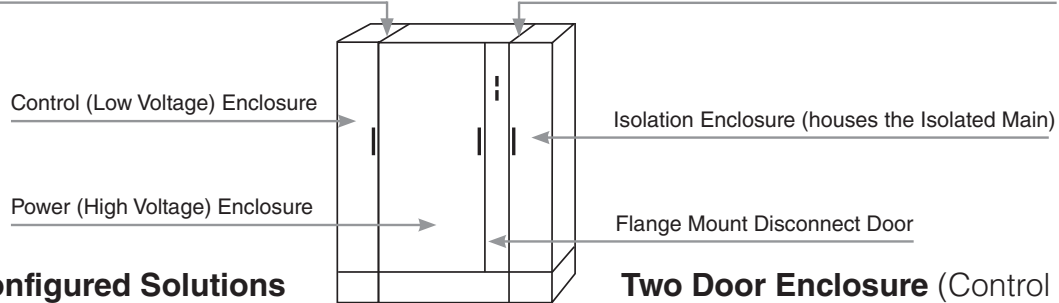
Two Door Enclosure (Control and Power Combined)

Part Number	Description	Overall HxWxD (mm)	Panel Dimensions High/Control Voltage Enclosure HxW (mm)	Panel Dimensions Isolation Enclosure HxW (mm)
TS83R71PC16R20	2 Door Enclosure (2 Doors for High Voltage and Control Voltage Combined)	2100x2200x500	1900x1700	1900x300
TS83R71PC16R24		2100x2200x600	1900x1700	1900x300
TS90R71PC16R24*		2300x2200x600	(1) 2100x900; (1) 2100x700*	2100x300

*(2) bayed enclosures for low/high voltage cabinet

Partition Wall Barrier Between High-Voltage and Control Enclosure

Partition Wall Barrier to High-Voltage, Line-Side Power



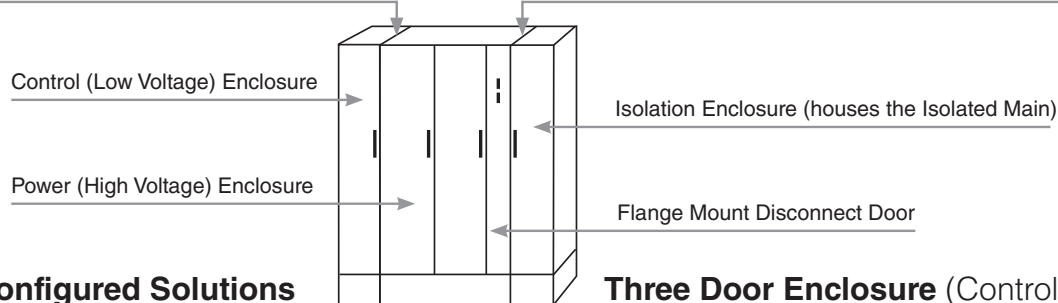
Preconfigured Solutions

Two Door Enclosure (Control and Power Separate)

Part Number	Description	Overall HxWxD (mm)	Panel Dimensions Control Voltage Enclosure HxW (mm)	Panel Dimensions High Voltage Enclosure HxW (mm)	PanelDimensions Isolation Enclosure HxW (mm)
TS83R24C32P16R20	2 Door Enclosure (1 Door Control Voltage; 1 Door High Voltage)	2100x1800x500	1900x500	1900x700	1900x300
TS83R24C40P16R20		2100x2000x500	1900x500	1900x900	1900x300
TS83R24C32P16R24		2100x1800x600	1900x500	1900x700	1900x300
TS83R24C40P16R24		2100x2000x600	1900x500	1900x900	1900x300
TS90R24C32P16R24		2300x1800x600	2100x500	2100x700	2100x300

Partition Wall Barrier Between High-Voltage and Control Enclosure

Partition Wall Barrier to High-Voltage, Line-Side Power



Preconfigured Solutions

Three Door Enclosure (Control and Power Separate)

Part Number	Description	Overall HxWxD (mm)	Panel Dimensions Control Voltage Enclosure HxW (mm)	Panel Dimensions High Voltage Enclosure HxW (mm)	Panel Dimensions Isolation Enclosure HxW (mm)
TS83R24C71P16R20	3 Door Enclosure (1 Door Control Voltage; 2 Doors High Voltage)	2100x2800x500	1900x500	1900x1700	1900x300
TS83R24C71P16R24		2100x2800x600	1900x500	1900x1700	1900x300
TS90R24C71P16R24*		2300x2800x600	2100x500	(1) 2100x700 (1) 2100x900	2100x300

*(2) bayed enclosures for high voltage cabinet

Customizable Solutions Your customizable solution can be expanded to include the widths listed below. Contact your Rittal Distributor or local representative for a solution that meets your precise needs.

Digit Description	Product Family	Overall Height in Inches	Rittal System	Low Voltage Enclosure Width in Inches	High Voltage Enclosure Width in Inches	Enclosure Width in Inches	Overall Depth in Inches
Available Options for 83" (2100 mm) Height Enclosure	TS	83"	R	24C=24"	32P=32"	16R=16"	20"
				32C=32"			
				40C=40"	40P=40"		24"
				48C=48"			
				63C=63"			
71C=71"	71P=71"						
Available Options for 90" (2300 mm) Height Enclosure	TS	90"	R	24C=24"	32P=32**	16R=16"	24"
				32C=32"			
				40C=40"			
				48C=48"			

*32" wide enclosure required; additional 32", 40", or 48" wide enclosures can be bayed to expand overall width

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- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

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